

**Project #6**  
**The evolution of income inequality in Brazil, 1839-1939**  
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This project is a pioneer exercise in quantifying the historical evolution of income distribution in Brazil. Census data on the occupational structure of the population in 1872 and 1920 are combined with varied sources of data on income by occupations to generate the profile of income distribution in the two Census benchmark years. Annual time series of income for a more limited sample of occupations are used to estimate the evolution of income inequality from 1839 to 1899. Alternatively, estimations for the 1872-1939 period combine the assumptions of trend values in the composition of employment by sector and of constant income per capita in each sector.

In recent years the relationship between economic growth and income distribution returned to top positions in the research agenda of economists and economic historians. Motivations came mainly from two major pieces of evidence: growth does not necessarily reduce inequality and growth can be hampered by inequality. Since the mid-sixties the Kuznets curve has summarized the conventional wisdom on the relationship between inequality and the level or the growth of income per capita: at low levels of income per capita, growth would lead to increased inequality up to a threshold level of income per capita when inequality starts to decline with further growth. The Kuznets curve describes a purely mechanistic relationship between the level or the growth of income per capita and inequality (Lundberg and Squire 2003). More recently, however, causality issues came to the forefront with inequality becoming more like a cause than an outcome of growth (Acemoglu et al. 2005). If inequality restricts growth, poor countries starting with high inequality are likely to grow less than others, thus inhibiting the possibilities of a fast reduction of inequality, both within and between countries. This is the analytical framework of the present study.

The ultimate purpose of the research is to contribute to the history of world income distribution in the last two centuries taking account of changes in income inequality both between and within countries. Bourguignon and Morrison (2003) in their "Inequality among world citizens: 1820-1992" made an important step in this way. One of the weaknesses of their study, however, is the lack of information about the less developed economies. In the Latin America case, for instance, they assumed that income distribution within each country remained unchanged from 1820 to 1950. Differences in the rates of growth of income per capita between countries were thus the only source of change in the inequality of income distribution in Latin America in the analysis.

There is little doubt that income distribution within Latin American countries went through significant changes from 1820 to 1950. Historical analysis tends to indicate that changes were particularly intense when the Latin American economies confronted the first globalisation boom in the last quarter of the 19<sup>th</sup> century and later the inward-looking industrialization phase of the early 20<sup>th</sup> century (O'Rourke & Williamson 1999, Williamson 1999, Bértola 2005, Bértola & Williamson 2006). The empirical evidence, however, is scanty since there is practically no quantitative study of income distribution with a sufficiently long historical perspective. The big challenge of the present research proposal is to fill the historical gap on income distribution for a group of Latin American countries including Argentina, Brazil, Chile, México and Uruguay.

Preliminary results for Brazil show somewhat counter-intuitive findings. Gini coefficients for 1872 and 1920 are much lower than figures estimated for recent decades but still high when compared to the experience of other countries. The strong oscillations of inequality during the 19<sup>th</sup> century are hard to explain except by data limitations. Accepting the available evidence, the coincident downward trends of inequality and GDP per capita in the last quarter of the 19<sup>th</sup> century suggests that the economic crisis hit mainly the privileged segments. It is possible to speculate that for the vast majority of population, income per capita close to subsistence levels were likely to be inflexible in the downward direction. The increasing trend of inequality starting in the 1890s is probably related to the abolition of slavery, mass immigration to Brazil and industrialization.